

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

The specification is amended to improve the language and to be consistent with the claims.

Claims 1-14 are present in this application, claims 12-14 being withdrawn from consideration. Claims 1, 2 and 6 stand rejected under 35 USC §102(b) over U.S. 5,911,961 (Horiuchi et al.). Claims 1-6 stand rejected under 35 USC §102(e) over U.S. 6,045,764 (Iizuka et al.). Under 35 USC §103(a), claims 7-9 stand rejected over Iizuka et al. in view of Horiuchi et al., and claims 10-11 stand rejected over Iizuka et al. in view of U.S. 6,334,936 (Tabatabaie-Raissi et al.).

Before addressing the prior art rejection, the applicants would like to provide the following discussion. According to amended claim 1, the present invention is directed to a carbon monoxide transforming apparatus, in which carbon monoxide and water in a reformed gas are made to react with each other to convert them into hydrogen and carbon dioxide. The apparatus comprises a reaction vessel including a gas inlet port to which the reformed gas containing carbon monoxide and water vapor is introduced and a gas outlet port from which the reformed gas containing the converted hydrogen and carbon dioxide is discharged, and a catalyst having platinum or palladium carried on a carrier which has a base point on the surface thereon. According to the carbon monoxide transforming apparatus, a reformed gas in which the amount of carbon monoxide is reduced and the amount of hydrogen is increased can be obtained.

Turning to the prior art rejections, Iizuka et al. is directed to a method for purifying exhaust gases from the internal combustion engines of vehicles. To be more specific, Iizuka et al. discloses using a catalyst having platinum carried on a carrier of titanium oxide when exhaust gas is purified by reducing NO_x to N₂ and by oxidizing CO to CO₂. Iizuka et al.

clearly does not disclose or suggest a carbon monoxide transforming apparatus, in which carbon monoxide and water in a reformed gas are made to react with each other to convert them into hydrogen and carbon dioxide, which comprises a reaction vessel including a gas inlet port to which the reformed gas containing carbon monoxide and water vapor is introduced and a gas outlet port from which the reformed gas containing the converted hydrogen and carbon dioxide is discharged, and a catalyst having platinum or palladium carried on a carrier which has a base point on the surface thereon.

Horiuchi et al. is directed to purifying diesel engine exhaust gas, particularly removing SOF and sulphur. Horiuchi et al. also does not suggest the apparatus of claim 1.

Tabatabaie-Raissi et al. is relied upon for a cooling coil. Even if such teachings were combined with the apparatus disclosed in Iizuka et al., the combination would fail to disclose or suggest the apparatus of claim 1 for the reasons given above regarding the rejection over Iizuka et al.

It is respectfully submitted that claims 1-11 are patentable over the cited prior art, and are in condition for allowance. A favorable decision to that effect is respectfully requested.

Respectfully submitted,

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